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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,207	07/08/2003	Yasuyuki Hoshino	Q76500	7342

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EXAMINER

BASHORE, ALAIN L

ART UNIT PAPER NUMBER

1762

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/614,207

Applicant(s)

HOSHINO ET AL.

Examiner

Alain L. Bashore

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 23-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, drawn to apparatus, classified in class 118, subclass 50.
- II. Claims 3-22, drawn to process, classified in class 427, subclass 162.
- III. Claims 23-26, drawn to product, classified in class 428, subclass 421.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus such as one without a vessel.

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as one that process other than fluorination.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Mr. Kramer on 3-22-06 a provisional election was made with traverse to prosecute the invention of group II claims 3-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-2, 23-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 20, 21, 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3, 20, 21, 22, there are recited "type" which is vague and indefinite because there is no meets and bounds.

6. Claims 9 is rejected as failing to include every limitation of the claim from which they depend as required under 35 U.S.C 112, fourth paragraph. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form to only one statutory class of invention, or rewrite the claim(s) in independent form.

The fact that independent and dependant claims are of different statutory classes does not, in itself, render the latter improper (i.e product-by-process as proper). The test as to whether a claim is a proper dependant claim is that it shall include every limitation of the claim from which it depends (35 USC 112, fourth paragraph), or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. See MPEP 608.01(n).

Regarding claim 9, since this claim is a process claim, the apparatus limitations must be recited in the process itself such that it is clear that the apparatus limitations further limit the process steps.

If claim 9 is rewritten as an apparatus claim or depend solely from apparatus claims, the claim will be withdrawn from consideration as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102 and 103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-4, 8, 10, 19, 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakurai et al.

Sakurai et al discloses a process for producing a fluorination treated substance. A substance to be treated in a reactor is enclosed, and a fluorine type gas is introduced into the reactor to bring the substance into contact with the fluorine type gas and thereby carry out fluorination reaction (para 0096-0098, 0132; fig 1 and 4).

8. Claims 5-6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Fukada et al.

Sakurai et al discloses what is described in the rejection above.

Sakurai does not explicitly disclose a fluorine concentration range claimed.

Fukada et al discloses a fluorine concentration range as claimed (para 0103).

It would have been obvious to one with ordinary skill in the art to include the claimed fluorine concentration range because Fukada et al teaches such yields enhanced surface properties (para 0098)

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Fukada et al as applied to claims above, and further in view of Meyer et al

Sakurai does not explicitly disclose controlling fluorine partial pressure.

Meyer et al discloses controlling partial pressure (col 10, lines 14-22).

It would have been obvious to one with ordinary skill in the art to include controlling fluorine partial pressure because Meyer et al teaches optimal surface treatment desirability (col 10, lines 14-22).

10. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Fukada et al as applied to claims above, and further in view of Meyer in view of Sumiyoshi and Tokai Carbon (JP '290).

Sakurai does not explicitly disclose surface abrading, further with abrasive grain, further with silicon dioxide as the grain.

Sumiyoshi discloses abrading (col 1, lines 40-48) and Tokai Carbon teaches use of silicon dioxide as the abrading grain (see abstract).

It would have been obvious to one with ordinary skill in the art to include surface abrading, further with abrasive grain, further with silicon dioxide as the grain for the purpose of post treatment of coating surfaces per se in the art.



11. Claim 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Fukada et al as applied to claims above, and further in view of Washita et al.

Sakurai does not explicitly disclose laminated thin film.

Washita et al discloses lamination (see abstract).

It would have been obvious to one with ordinary skill in the art to include a laminated thin film because Washita teaches product usability obtained by lamination (i.e. safety glasses).

12. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Fukada et al as applied to claims above, and further in view of Yusuke (JP '512).

Sakurai does not explicitly disclose heating for densification.

Yusuke et al discloses heating for densification (see abstract).


It would have been obvious to one with ordinary skill in the art to include heating for densification because Yusuke teaches such as helpful to correct defects.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Alain L. Bashore  
Primary Examiner  
Art Unit 1762